Section 508: Why comply?

It's the right thing to do:

- 11,400,000 people have visual conditions not correctible by glasses.
- 6,400,000 new cases of eye disease occur each year.
- 2,800,000 people are visually handicapped from color blindness.
- 1,100,000 people are legally blind.

It's the law:

 Section 508 of the Rehabilitation Act (29 U.S.C. 794d), as amended by the Workforce Investment Act of 1998 (P.L. 105-220), August 7, 1998.

"I call on all Americans to celebrate the vital contributions of individuals with disabilities as we work towards fulfilling the promise of the ADA to give all our citizens the opportunity to live with dignity, work productively, and achieve their dreams."

GEORGE W. BUSH Proclamation, July 24, 2007

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Step I: Getting Started

- Using toolbars
- Naming files

A. Using Toolbars:

Microsoft Word uses menus, tool bars, icons and other controls to format documents, uses special features, and tracks changes made for editing.



To turn on the tool bars:

- 1. Click on View; Toolbars.
- 2. Click on Formatting;
- 3. Click on View; Toolbars.
- 4. Click on Reviewing.



B. Naming Files

It's a good idea to name and save your file as soon as you start work. File names must be a continuous string of characters. This string should not contain any special characters. The only period in the file name should be the period that precedes the file extension. Special characters are:

!	Exclamation Point
,	Comma
,	Semi-colon
:	Colon
?	Question Mark
()	Left or Right Parentheses
{}	Left or Right Brace
@	At sign
/\	Left or Right Bar (Solidus)
=	Equal sign
+	Plus sign

Example:

Improper file name: June Monthly Report.doc

Proper file name: JuneMonthlyReport.doc or June-Monthly-Report.doc

Step 2: Creating an Accessible Word Document

Accessibility starts with a properly formatted Word document. This section covers the proper steps to make your Word documents accessible.

- Using style elements to format documents;
- Adding Title, Subject, Keywords, Author, Company and Language to the document properties;
- Adding alternative text to images and other graphic elements within the document;
- Using Tables;
- Inserting hyperlinks;
- Providing proper tab order and help text for forms

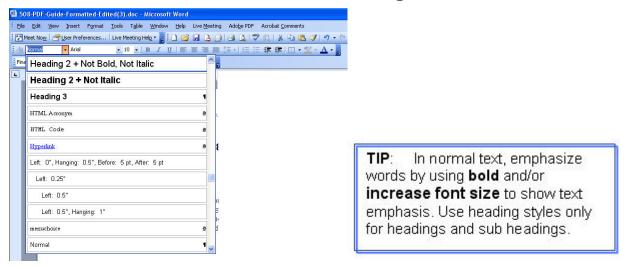
A. Use style elements to format your document

The use of style elements in Microsoft Word creates the necessary tags needed by screen readers to navigate the document.

1. **Use style elements** to create headers:

Highlight the text you wish to format:

- a) On the **formatting toolbar**, use the drop down menu to access the format style you wish to use.
- **b)** Select the **style**; the highlighted text will change to the format you have chosen.
- c) Use Heading 1 for the document's title.
- d) Use Heading 2 for the document's main section headings.
- e) Use Heading 3 for subsection headings.
- f) Use Normal for regular paragraph text.
- **g)** Heading styles should be used only to indicate the hierarchical level of a title or heading.



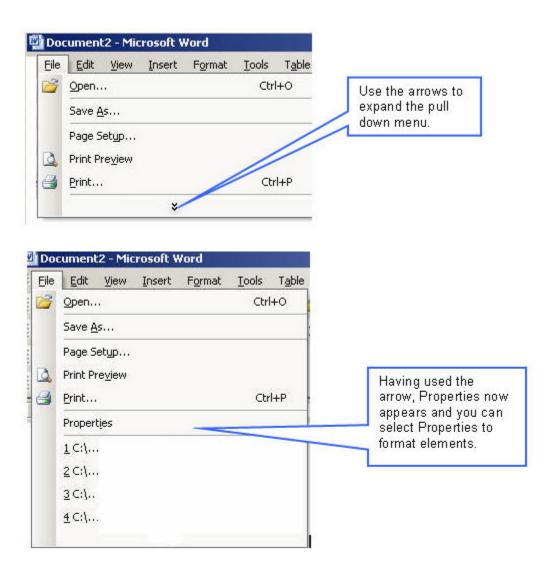
- Accessible Templates: If you use the same type of document a lot, you can turn the document with the appropriate structural markup into a template that can be used multiple times without having to reinvent the accessible style.
- 3. **Lists:** Use Word's Bullet and Numbering preformatted lists as a tool to make your lists accessible.
 - a) Select the items to which you wish to add numbering or bullets. (Each item should be on its own line, i.e., in its own paragraph.)
 - b) Click Numbering or Bullets Buttons in the Formatting toolbar.

B. Document Properties: Add Title, Subject, Keywords, Author, Company & Language.

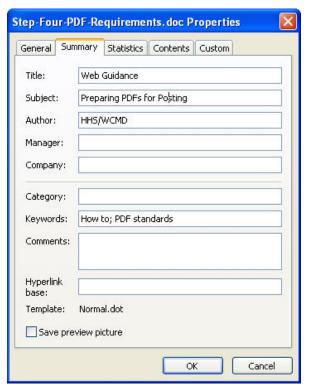
The Title, Subject, Author, Keywords and Language are important elements of any document. They are used by search engines and screen readers to find and identify content in documents.

The document properties form may be displayed by:

- 1. Clicking on File;
- Then Properties;
- 3. If **Properties** is not visible, click on the **arrows** to expand the pull down menu;



4. Select the **Summary** tab when the following menu is displayed:



5. Complete the form as follows:

Title: The title of the document.

Subject: Brief identification of the subject of the document

Author: Your Office, Division, or OpDiv.

Company: Set to "HHS".

Manager: Optional

Hyperlink

Base: Optional

Category: Optional

Keywords: The keywords are associated with the document during a search and will

effectively rank the document for relevance. The closer your keywords

are to the search words the user enters, the higher your document will be rated in the search. When using multiple keywords, separate them with a comma. Be sure to choose words that are relevant to

the content.

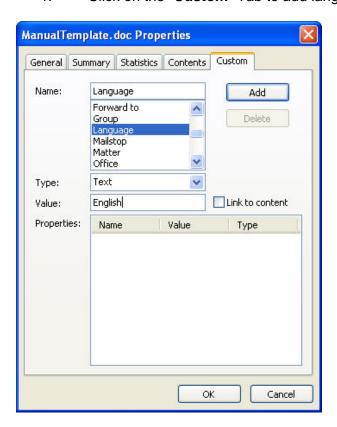
HINT:

Viewing Tag Clouds for related Web sites can help you choose the best keywords. Ask your WCD liaison for more information.

Comments: Optional; if included they should be appropriate and meaningful for the general public.

Unfortunately, *MS* Word does not set a default language. You need to specify the primary language used to create each document.

1. Click on the "Custom" Tab to add language. The following window will be displayed:



- 2. In the **Name** field, use drop down menu to select **language** from the list.
- 3. In the **Value** field, type the language used (typically "English").
- 4. Click the **Add** button; finish by clicking **OK**.

C. Add alternative (alt) text to images

Alternative or Alt text is required for all images in a document.



- Right-click on the image;
- 2. Select Format Picture.
- 3. The **Format Picture** dialog box will appear. Select the **Web** tab.
- 4. In the **Alternative text** box, type in the description of the image.
- 5. Click "**OK**".



HINT: Descriptions for images should be easy to understand, using simple terms. Convey the information that is represented in the picture, graphic or illustration. Remember that the alternative text is what a screen reader is "saying" to the disabled user.

Note 1: For decorative images without meaningful content, alternative text should have a space, " " inserted in the **alternative text box.**

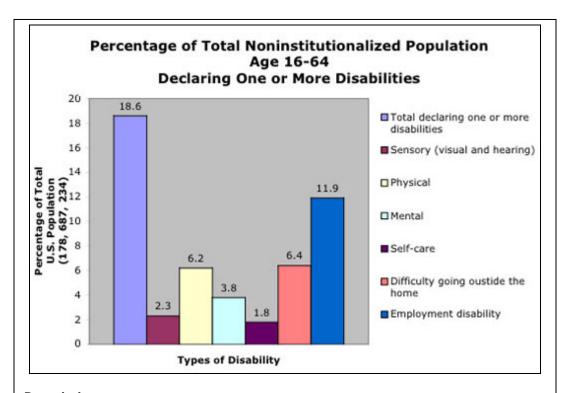
- 1. Open the **alternative text box** (as above);
- 2. Hit the **space bar** once;
- 3. Then click on "OK".

Note 2: Background images or watermarks do not have to be tagged. When the document is converted to PDF these images will not be detected and will not have to be tagged.

D. Use Long Description for Charts and Graphs

In some instances, an image is too complex to describe in a few words. Charts and graphs are primary examples of such images. Although there does not appear to be any limit to the length of text in an "alt" attribute, "alt text" is meant to be relatively brief and to the point.

By including the long description in the graphic you will add information that can be used by all readers, not just those with disabilities. See how this is accomplished with an image of a graph:



Description:

The above bar graph shows the percentage of total U.S. non-institutionalized population age 16-64 declaring one or more disabilities. The percentage value for each category is as follows:

Total declaring one or more disabilities: 18.6 percent

Sensory (visual and hearing): 2.3 percent

Physical: 6.2 percent Mental: 3.8 percent Self-care: 1.8 percent

Difficulty going outside the home: 6.4 percent

Employment disability: 11.9 percent

(Data retrieved from 2000 U.S. Census - external link)

E. Table Usage

Microsoft Word does not provide an easy method for creating accessible tables. If you have complex tables it is highly recommended that a description or explanation of the table contents be included in the text of the document. If at all possible, construct the table so it will read logically from left to right, top to bottom order.

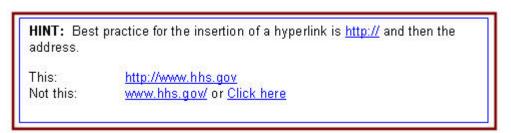
F. Hyperlinks in Documents

Hyperlinks should be active (they turn blue) when they are copied into the document. If the links are not active they may be made active by using the "Insert Hyperlink" command.

- 1. First highlight the text that needs to be made active;
- 2. Then click on Insert;
- 3. Then Hyperlink (Ctrl + K) or click on the icon that that has a chain overlapping the bottom of a ball.



You can also right click on your mouse at the point where you wish to insert a hyperlink, and select "Hyperlink" from the dropdown menu. It is strongly suggested that you copy and paste the hyperlink directly from the Internet page to avoid making mistakes when typing the URL manually.



Adobe Conversion Settings in Word Step 3: Preparing Word Documents for PDF Conversion

Make sure the document is properly formatted (from Step 2):

- File names do not contain spaces or special characters.
- Document Properties are filled out;
- Hyperlinks and e-mail addresses all work.

Then check the following conditions:

- All edits must be accepted;
- Track Changes must be turned off;
- All Comments must be removed:

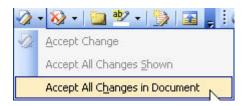
A. All Edits must be accepted:

The icon for accepting edits is located on the **reviewing** tool bar (See Sec. 1-A), and is displayed as check mark on a page



Changes may be accepted by:

- 1. Clicking on the **Accept Change** icon,
- 2. Then selecting **Accept All Changes in Document** from the drop down menu.

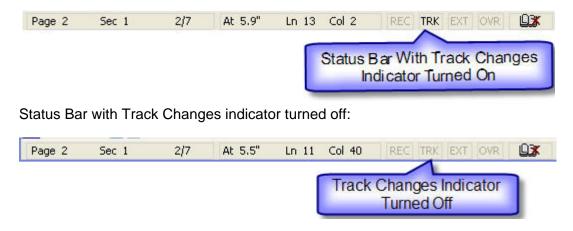


B. Turn Track Changes Off:

Check to see if Track Changes is on or off. Track Changes is a toggle. If Track Changes is on (see example below), click the **Track Changes Icon.** The indicator for Track Changes is located in the "Status Bar" displayed at the bottom of the Word window.

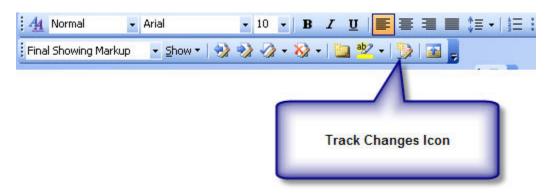
HINT: if Track Changes is on, the icon is highlighted with a lined box around the icon. When turned off, the outlined box disappears.

Status Bar (at the bottom of your window) with Track Changes indicator turned on:



If Track Changes is on (see above), click the Track Changes Icon.

The icon for Track Changes is located on the "Reviewing" tool bar and is displayed with a star on the corner of a document and pen.

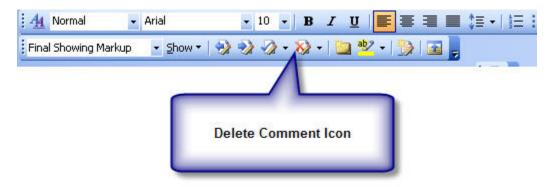


C. Remove All Comments:

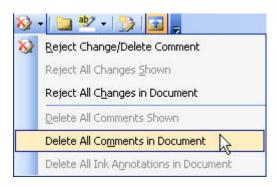
Note: Always perform this step. Comments may be hidden.

To remove comments

1. Click on the **Reject Change/Delete Comment** icon:



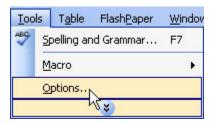
2. Select **Delete All Comments in Document** from the drop down:



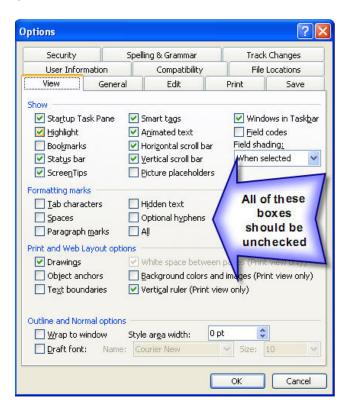
D. All Formatting Marks Turned Off

All formatting marks must be turned off.

- 1. Click on **Tools**;
- 2. Then **Options** to display the Option Menus.



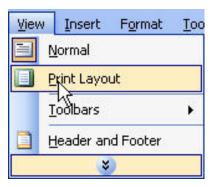
Formatting marks may be found under the **View** tab. Ensure that all formatting marks are turned off.



E. The Print Layout View

The Print Layout View must be turned on.

- 1. From the Standard tool bar located at the top of the Word window,
- Select View;
- 3. Then Print Layout.



Before you start conversion, be sure to **SAVE** your work!

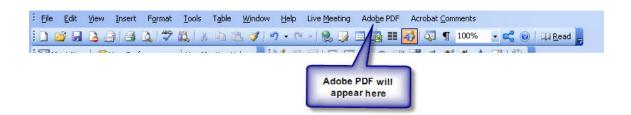
F. Adobe Conversion Settings in Word

- Basic Requirements
- Conversion Settings
- The Conversion

TIP The "File; Print" method of creating a PDF in any application will **not** transfer any of the tags that may have been inserted in your original document and does **not** create a 508 compliant file.

1. Basic Requirements

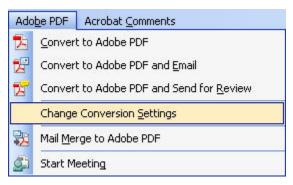
Adobe Acrobat Professional version 8.0 **must** be installed on your computer in order to properly convert Word documents to PDF format. If you have version 7.0, you **must** upgrade to version 8.0. Acrobat no long supports Adobe version 7.0. If Adobe Acrobat Professional has been installed, "Adobe PDF" will appear in the top menu bar.



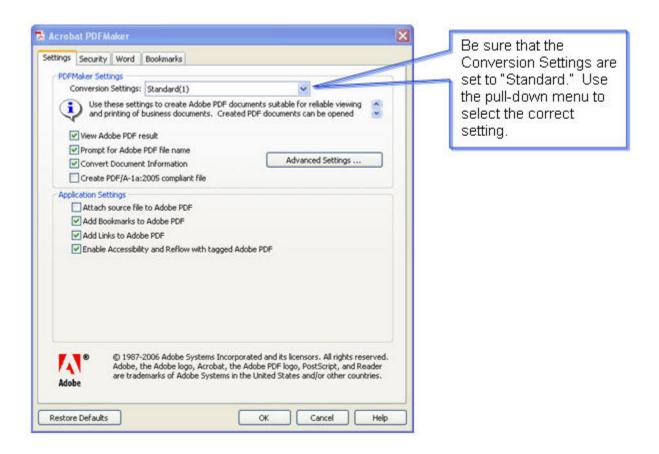
2. Conversion Settings

Before creating a PDF document, check the conversion settings for Adobe PDF in Microsoft Word.

- a) Click on **Adobe PDF** located in the top menu bar, usually at the end of the bar;
- b) Then select Change Conversion Settings.



The following window will appear:



Be sure the following items are checked:

Settings:

- ☑ View Adobe PDF result
- ☑ Prompt for Adobe PDF file name
- ☑ Convert Document Information

Application Settings:

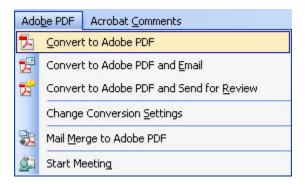
- ☑ Add Bookmarks to Adobe PDF
- ☑ Add Links to Adobe PDF
- ☑ Enable Accessibility and Reflow with Tagged Adobe PDF

Click **OK** to return to the document.

Once the settings have been changed and saved they will be applied to future conversions to PDF.

3. The Conversion

To convert the document Click on "Adobe PDF" and select "Convert to Adobe PDF" from the menu.

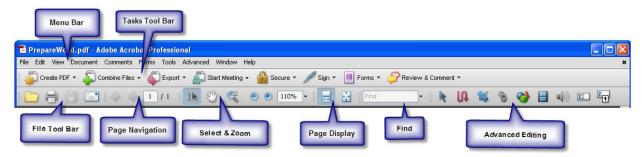


You will be prompted to **Save** the document; once the conversion is complete, the PDF will be opened in Adobe.

You now have a document that has been converted to PDF. The document now needs to be checked for 508 compliance in Acrobat Adobe Professional 8.0.

Step 4: Preparing a PDF For Posting

A. Using Toolbars:



Adobe Acrobat 8.0 uses menus, tool bars, icons and other controls to format PDFs. It also uses special features, and creates additional accessibility functions.

You are now ready to prepare the converted document for posting on the Web.

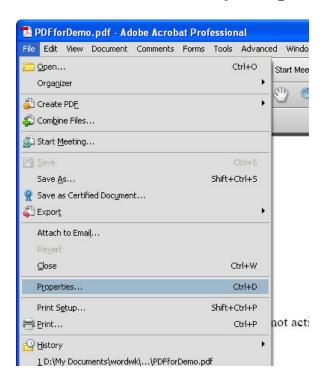
- 1) Document Properties
- 2) Bookmarks
- 3) Hyperlinks
- 4) Accessibility Tags
- 5) Accessibility Report
- 6) Review Tags
- 7) Edit PDF Tags
- 8) Reading Order
- 9) Reduce File Size

B. Document Properties:

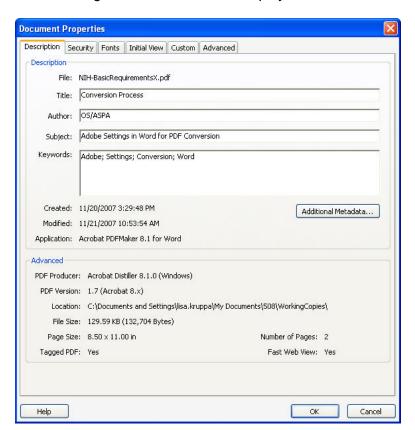
PDF Document properties are very similar to Word Document properties. Word document properties will transfer to the PDF document properties.

If you receive a PDF and are not sure if the source was formatted correctly, then check the properties by following **the instructions below**.

PDF Document properties may be displayed by clicking on "File", then "Properties".



The following tabbed menu will be displayed:



Description Tab:

File: Displays the name of the file.

Title: The title of the document.

Author: Your Office, Division, or OpDiv.

Subject: Brief identification of the subject of the document

Keywords: The keywords are associated with the document during a search and will

effectively rank the document for relevance. The closer the search words match your keywords, the higher the document will be rated in the search. When using multiple keywords, separate them with a comma. Be sure to choose words that

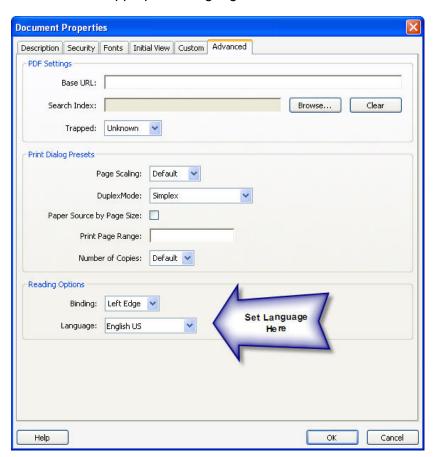
are relevant to the content.

Language: To add language click on the "**Advanced**" Tab.

The following window will be displayed.

Under "Reading Options" use the Language dropdown menu to select the

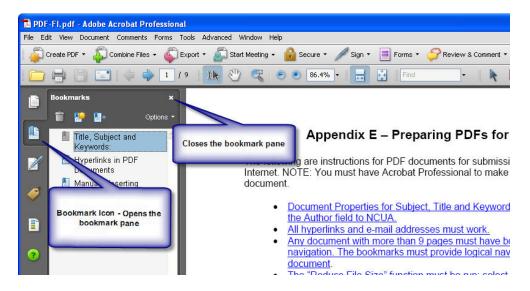
appropriate language.



C. Bookmarks:

Bookmarks are a collection of direct links to content within the document. They provide users with a means of navigating the document. Any PDF document over 9 pages *must* have bookmarks included.

Bookmarks may be displayed by clicking on the bookmark icon.



Separate training for Bookmarks will be provided.

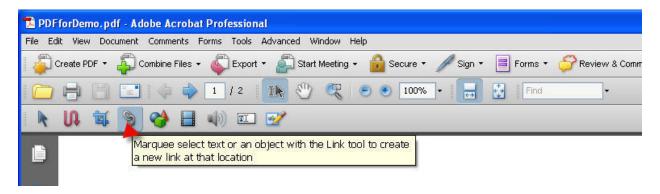
D. Hyperlinks in PDF Documents

Active hyperlinks set in Word will transfer as active links in the PDF. Hyperlinks must be tested to ensure the link is not broken and that the link is going to the intended web page.

If hyperlinks are not active or need to be changed, follow the instructions below.

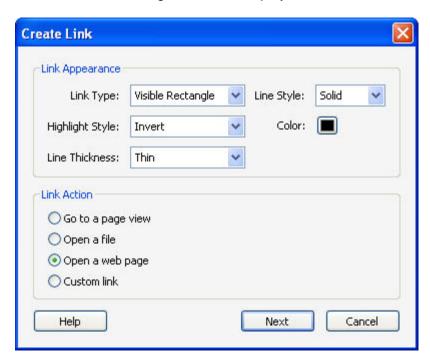
To insert a hyperlink into a PDF document:

1. Select the "Link Tool" found in the "Advanced Editing" tool bar.



2. A set of "cross hairs", which resembles a "+" sign, will be displayed in the window. Use these cross hairs as your cursor to highlight the text to be linked.

The Create Link Dialog box will be displayed.



- 3. Select "Open a web page" in the "Link Action" section of the dialog box.
- 4. Click the "**Next**" button.
- 5. Another dialog box will be displayed requesting the link.
- 6. Enter the link. (It is strongly suggested that you **copy and paste** the hyperlink directly from the Internet page to avoid making mistakes when typing the URL manually.
- 7. Click "**OK**".



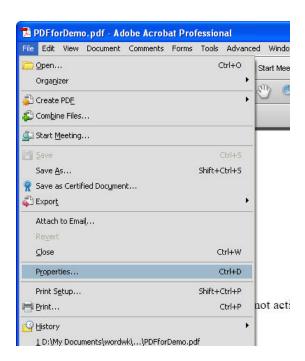
E. All documents must have accessibility tags

Accessibility tags are critical for assistive technology to "read" a document.

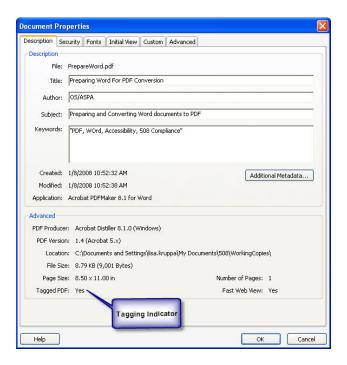
Many times these tags convert over from the Microsoft document into PDF. However, do not assume that they will automatically do so.

To check for accessibility tags, view the document properties:

1. Click on **File**, then **Properties**.



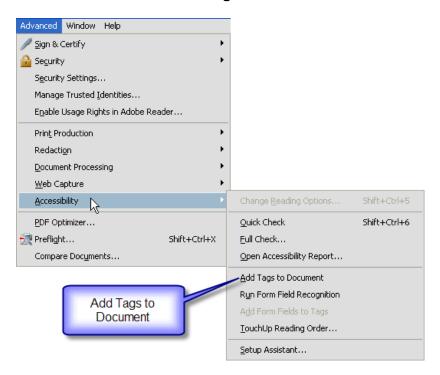
If the document has accessibility tags they will be displayed under the **Description** Tab. Tagged PDF: Yes



If "Yes" is displayed, click "OK" to close Document Properties.

If the Tagged PDF indicator is set to No, you must insert accessibility tags:

- 1. Select **Advanced** from the **Main Toolbar**;
- Select "Accessibility";
- 3. Then select "Add Tags to Document"



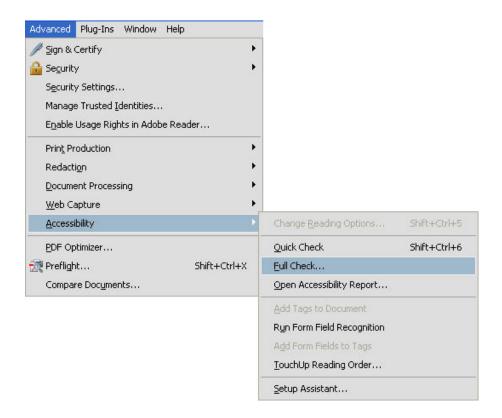
A wizard will add the needed accessibility tags to the document. Once a document has been tagged it **must** be checked with the accessibility reporting tool in Adobe Acrobat Professional.

F. Run Accessibility Report

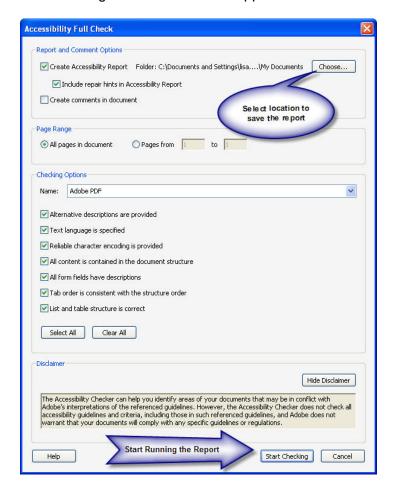
The accessibility report will provide information on most tagging problems.

To run an accessibility report:

- 1. Click on "Advanced" located in the Main Toolbar;
- 2. Then click on "Accessibility";
- 3. Then "Full Check"



The following default window will appear:

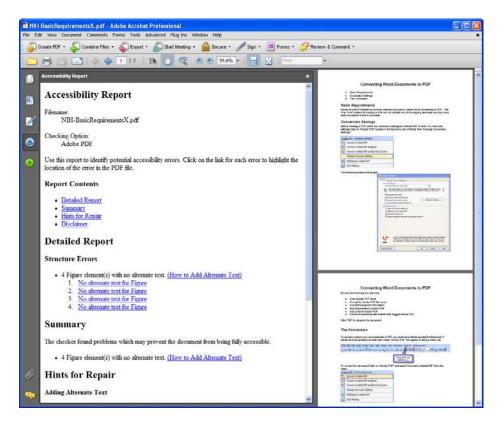


Make sure the report is saved to the correct folder on your computer.

- 1. Click on "Choose" to select the location (C drive, My Documents, etc.)
- Make sure all the boxes are checked in "Checking Options".
- Click on "Start Checking" which will run the report.

A window with the report summary will appear;

- 1. Click "**OK**" to view the report.
- 2. The report will be displayed in a **split screen**.
- 3. The report will be on the **left side** of the screen; the PDF will be on the **right side**.
- 4. The issues identified in the **Detailed Report Section** link to the object(s) in your PDF document that need(s) to be corrected.
- 5. There are also **Links** in the Detailed Report Section which will guide you on how to **repair any errors.**



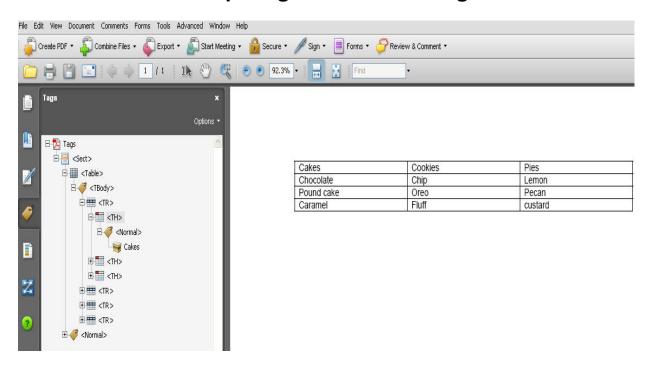
G. Tables

Tables converted from Microsoft Word will need to have the associated Tags edited.

Tables are designated as "Table" in the Tags panel. The detail of the table tag may be displayed by clicking on the "+" to expand the lower level objects of the table.

Column/Row headers must be tagged to associate the data cells with the corresponding column/row heading cells. This will provide column/row heading information for screen readers.

The table should also be ordered so it can be interpreted from **left** to **right**, **top** to **bottom** order.



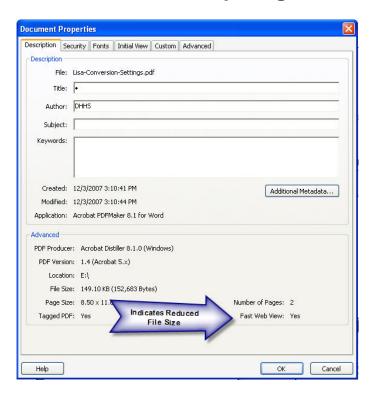
Separate training will be provided for Table Tagging.

Adobe has both <u>on-line information</u> and a <u>downloadable documentation</u> on the tagging of PDF documents.

H. Reduce File Size

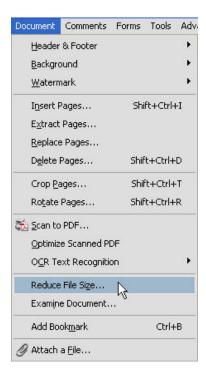
Reducing the size of a PDF file will make it download faster.

If the file size has already been reduced it will be indicated in the "Document Properties" window. In the lower right corner of the window "Fast Web Viewing" will show as "Yes".



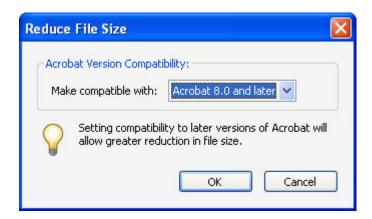
To reduce the file size:

- 1. Close **Document Properties** window.
- 2. Select "Document" from the Main Toolbar in the Acrobat window;
- 3. Then select "Reduce File Size".
- 4. In the drop down list, select "Acrobat 8.0 and later".



A dialog window for "Reduce File Size" will be displayed.

- 5. Click on "OK".
- 6. You will then be asked to save the file.
- 7. **Save** your file.



You are now done! Your PDF is 508 compliant and ready to post.